SECURITIES AND EXCHANGE COMMISSION (Release No. 34-57850; File No. SR-CBOE-2006-105)

May 22, 2008

Self-Regulatory Organizations; Chicago Board Options Exchange, Incorporated; Order Approving a Proposed Rule Change, as Modified by Amendment No. 2, Regarding the Listing and Trading of Binary Options on Broad-Based Security Indexes

## I. Introduction

On December 29, 2006, the Chicago Board Options Exchange, Incorporated ("CBOE" or "Exchange") filed with the Securities and Exchange Commission ("Commission"), pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 ("Act")<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> a proposed rule change to list and trade binary options on broad-based security indexes. The CBOE filed Amendment Nos. 1 and 2 to the proposal on September 6, 2007, and April 4, 2008,<sup>3</sup> respectively. The proposed rule change, as modified by Amendment No. 2, was published for comment in the <u>Federal Register</u> on April 17, 2008.<sup>4</sup> The Commission received no comments regarding the proposal. This order approves the proposed rule change, as amended.

## II. Description of the Proposal

#### A. Generally

The CBOE proposes to list and trade certain cash-settled, European-style binary options on broad-based security indexes. At expiration, an option listed pursuant to this proposal would pay an exercise settlement amount equal to the exercise settlement value multiplied by the

<sup>&</sup>lt;sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>&</sup>lt;sup>2</sup> 17 CFR 240.19b-4.

Amendment No. 2 replaces the original filing and Amendment No. 1 in their entirety.

See Securities Exchange Act Release No. 57642 (April 9, 2008), 73 FR 20985.

contract multiplier.<sup>5</sup> Unlike a traditional option, a binary option will pay a fixed sum at expiration regardless of the magnitude of the difference between the settlement value and the option's exercise price. A call binary index option would pay out if the settlement value of the underlying index were at or above the option's exercise price at expiration, and a put binary index option would pay out if the underlying index were below the option's exercise price at expiration.<sup>6</sup>

The Exchange is proposing to add a new series of rules to Chapter XXII of its rulebook (which is currently "reserved") relating to binary options. Trading of binary options would also be subject to Chapters I through XIX, XXIV, XXIVA, and XXIVB, as supplemented by the new rules of Chapter XXII.

#### B. Listing Standards

Under the proposal, the Exchange may from time to time approve for listing and trading on the Exchange binary option contracts on a broad-based index<sup>7</sup> which has been selected in accordance with CBOE Rule 24.2 and the Interpretations and Policies thereunder.<sup>8</sup> After a particular binary option class has been approved for listing and trading on the Exchange, the Exchange may from time to time open for trading series of options on that class.<sup>9</sup> The Exchange may add new series of options on the same class, as provided for in CBOE Rule 24.9 and the

The exercise settlement value will be an amount determined by the CBOE on a class-byclass basis and will be equal to or between \$10 or \$1,000, unless otherwise adjusted pursuant to CBOE Rule 5.7. See CBOE Rule 22.1(e).

<sup>&</sup>lt;sup>6</sup> See CBOE Rules 22.1(b) and (c).

CBOE Rule 24.1(i)(1) defines a "broad-based index" as "an index designed to be representative of a stock market as a whole or of a range of companies in unrelated industries."

<sup>8</sup> See CBOE Rule 22.3(a).

<sup>9</sup> See CBOE Rule 22.3(c).

Interpretations and Policies thereunder. Additional series of the same binary option class may be opened for trading on the Exchange when the Exchange deems it necessary to maintain an orderly market or to meet customer demand. The maintenance listing standards for options on broad-based indexes set forth in CBOE Rule 24.2 and the Interpretations and Policies thereunder will be applicable to binary options on broad-based indexes. Binary options form a separate class from other options overlying the same broad-based index.

Binary options traded on the Exchange will be designated as to expiration date, exercise price, exercise settlement amount, contract multiplier, and underlying broad-based index. <sup>13</sup>
Binary index options will be a.m.-settled unless the traditional options on the same underlying index (i.e., the S&P 100 Index ("OEX")) are p.m.-settled. <sup>14</sup> Under the proposal, binary options may expire from one day to 36 months from the time that they are listed. <sup>15</sup>

# C. <u>The Options Clearing Corporation</u>

The Options Clearing Corporation ("OCC") will issue, clear, and settle the binary options contemplated in this proposal. The OCC has amended its by-laws and rules to accommodate the listing and trading of binary options. <sup>16</sup> In addition, the CBOE understands that the OCC will

See CBOE Rule 22.3(d).

See CBOE Rule 22.4.

<sup>&</sup>lt;sup>12</sup> <u>See</u> CBOE Rule 22.3(a).

<sup>13 &</sup>lt;u>See CBOE Rule 22.3(b).</u>

See id.

See CBOE Rule 22.3(c).

See Securities Exchange Act Release No. 56875 (November 30, 2007), 72 FR 69274 (December 7, 2007) (order approving File No. SR-OCC-2007-08).

submit to the Commission a proposed supplement to the Options Disclosure Document required by Rule 9b-1 under the Act<sup>17</sup> to incorporate binary options on broad-based security indexes.

## D. <u>Position and Exercise Limits and Position Reporting Requirements</u>

The Exchange is adopting a two-pronged approach to determine position limits for binary options. <sup>18</sup> In determining compliance with CBOE Rule 4.11, the Exchange proposes a fixed position limit of 15,000 contracts for binary options on a broad-based index for which traditional options on the same broad-based index have no position limit, provided that the exercise settlement amount is \$10,000. <sup>19</sup> For binary options that have an exercise settlement amount that is not equal to \$10,000, the position limit will be 15,000 times the ratio of 10,000 to the exercise settlement amount (e.g., if the binary option exercise settlement amount is \$1,000, then the position limit is 150,000 contracts. If the binary option exercise settlement amount is \$12,000, then the position limit is 12,500 contracts). <sup>20</sup>

The Exchange is adopting a formulaic position limit for binary options on a broad-based index for which traditional options on the same broad-based index have a position limit.<sup>21</sup> The formulaic position limit will be calculated in accordance with the following methodology: (1) determine the Market Capitalization of the S&P 500 Index; (2) determine the Market Capitalization of the broad-based index underlying the binary option; and (3) calculate the Market Capitalization Ratio of the broad-based index underlying the binary option to the Market Capitalization of the S&P 500 Index. The position limit for binary options subject to a formulaic

<sup>&</sup>lt;sup>17</sup> 17 CFR 240.9b-1.

See CBOE Rule 22.6.

<sup>&</sup>lt;sup>19</sup> <u>See</u> CBOE Rule 22.6(a).

See id.

<sup>21 &</sup>lt;u>See CBOE Rule 22.6(b).</u>

limit with an exercise settlement amount of \$10,000 will be: (1) 10,000 contracts if the Market Capitalization Ratio is greater than or equal to 0.50; (2) 5,000 contracts if the Market Capitalization Ratio is less than 0.50 but greater than or equal to 0.25; or (3) 2,500 contracts if the Market Capitalization Ratio is less than 0.25 but greater than or equal to 0.10.<sup>22</sup> The Exchange will seek Commission approval prior to establishing position limits for binary options on broad-based indexes that have a Market Capitalization Ratio that is less then 0.10.<sup>23</sup> For binary options that have an exercise settlement amount that is not equal to \$10,000, the position limit will be the ratio of 10,000 to the exercise settlement amount multiplied by the applicable formulaic limit.<sup>24</sup>

CBOE Rule 22.6 also provides that positions in binary options on the same broad-based index that have different exercise settlement amounts will be aggregated. <sup>25</sup> In determining compliance with the position limits set forth in Rule 22.6, binary options will not be aggregated with non-binary option contracts on the same or similar underlying security or broad-based index. <sup>26</sup> In addition, binary options on broad-based indexes will not be aggregated with non-binary option contracts on an underlying stock or stocks included within such broad-based index, and binary options on one broad-based index shall not be aggregated with binary options on any other broad-based index. <sup>27</sup>

For purposes of the position limits established in Rule 22.6, a long position in a put binary option and a short position in a call binary option will be considered to be on the same

<sup>22 &</sup>lt;u>See</u> CBOE Rule 22.6(b)(4).

<sup>23 &</sup>lt;u>See CBOE Rule 22.6(b)(4)(iv).</u>

<sup>24 &</sup>lt;u>See CBOE Rule 22.6(b)(5).</u>

<sup>25 &</sup>lt;u>See CBOE Rule 22.6(b)(5)(c).</u>

<sup>&</sup>lt;sup>26</sup> See CBOE Rule 22.6(b)(5)(d).

See id.

side of the market; and a short position in a put binary option and a long position in a call binary option will be considered to be on the same side of the market.<sup>28</sup> Binary options will not be subject to the hedge exemption to the standard position limits found in Rule 4.11.<sup>29</sup> Under Rule 22.6, the following qualified hedge exemption strategies and positions will be exempt from the established binary option position limits: (1) a binary option position "hedged" or "covered" by an appropriate amount of cash to meet the settlement obligation (e.g., \$1,000 for a binary option with an exercise settlement amount of \$1,000); (2) a binary option position "hedged" or "covered" by a sufficient amount of a related or similar security to meet the settlement obligation; or (3) a binary option position "hedged" or "covered" by a traditional option covering the same underlying broad-based index sufficient to meet the settlement obligation.<sup>30</sup>

Binary options will not be subject to exercise limits due to the fact that they are European-style options and are automatically exercised at expiration if the settlement value of the underlying index is equal to or greater than the exercise price of a call binary option or less than the exercise price in the case of a put binary option.<sup>31</sup>

CBOE Rule 22.8, "Reports Related to Position Limits and Liquidation of Positions," states that references in Rules 4.13, "Reports Related to Position Limits," and 4.14, "Liquidation of Positions," to Rule 4.11 in connection with position limits will be deemed, in the case of binary options, to be to Rule 22.6. As such, in accordance with CBOE Rule 4.13(a), a position in a binary option must be reported to the Exchange via the Large Option Positions Report when an account establishes an aggregate same side of the market position of 200 or more binary options.

<sup>28 &</sup>lt;u>See CBOE Rule 22.6(e)</u>.

<sup>&</sup>lt;sup>29</sup> <u>See CBOE Rule 22.6(f).</u>

See CBOE Rule 22.6(f)(1) - (3).

See CBOE Rule 22.7.

In computing reportable binary options under existing Rule 4.13: (1) positions in binary options that have different exercise settlement amounts will be aggregated; (2) positions in binary options will not be aggregated with non-binary option contracts on the same or similar underlying security or broad-based index; (3) positions in binary options on broad-based indexes will not be aggregated with non-binary option contracts on an underlying stock or stocks included within such broad-based index; and (4) positions in binary options on one broad-based index will not be aggregated with binary options on any other broad-based index.<sup>32</sup> The Exchange believes that the reporting requirements and the surveillance procedures for hedged positions will enable the Exchange to closely monitor sizable positions and corresponding hedges.

## E. <u>Margin</u>

The Exchange is amending Rule 12.3, "Margin Requirements," to include requirements applicable to binary options. Under Rule 12.3, as amended, for a Margin Account, no binary option carried for a customer shall be considered of any value for purposes of computing the margin required in the account of such customer.<sup>33</sup> The initial and maintenance margin required on any binary option carried long in a customer's account is 100% of the purchase price of such binary option (i.e., the premium).<sup>34</sup> In connection with a short position in a binary option, the customer margin required is the exercise settlement amount.<sup>35</sup> As for spreads, no margin is required on a binary call option (put option) carried short in a customer's account that is offset by a long binary call option (put option) for the same underlying security or instrument that

See CBOE Rule 22.8.

<sup>&</sup>lt;sup>33</sup> <u>See CBOE Rule 12.3(m)(1).</u>

<sup>34 &</sup>lt;u>See CBOE Rule 12.3(m)(1)(i).</u>

<sup>&</sup>lt;sup>35</sup> See CBOE Rule 12.3(m)(1)(ii).

expires at the same time and has an exercise price that is less than (greater than) the exercise price of the short call (put).<sup>36</sup> The long call (put) must be paid for in full.<sup>37</sup> As for a straddle/combination, when a binary call option is carried short in a customer's account and there is also carried a short binary put option that expires at the same time and has an exercise price that is less than or equal to the exercise price of the short call, the initial and maintenance margin required is the exercise settlement amount applicable to one contract.<sup>38</sup>

For a cash account, a binary option carried short in a in a customer's account will be deemed a covered position, and eligible for the cash account, if either one of the following is held in the account at the time the option is written or is received into the account promptly thereafter: (1) cash or cash equivalents equal to 100% of the exercise settlement amount; (2) a long binary option of the same type (put or call) for the same underlying security or instrument that is paid for in full and expires at the same time, and has an exercise price that is less than the exercise price of the short in the case of a call or greater than the exercise price of the short in the case of a put; or (3) an escrow agreement.<sup>39</sup> The escrow agreement must certify that the bank holds for the account of the customer as security for the agreement cash, cash equivalents, one or more qualified equity securities, or a combination thereof having an aggregate market value of not less than 100% of the exercise settlement amount and that the bank will promptly pay the member organization the cash settlement amount in the event the account is assigned an exercise notice.<sup>40</sup> The Exchange believes that these levels are appropriate because risk exposure is

<sup>&</sup>lt;sup>36</sup> See CBOE Rule 12.3(m)(1)(iii).

See id.

<sup>38 &</sup>lt;u>See CBOE Rule 12.3(m)(1)(iv).</u>

<sup>&</sup>lt;sup>39</sup> <u>See CBOE Rule 12.3(m)(2).</u>

See id.

limited with binary options and the customer initial and maintenance margin would be equal to the maximum risk exposure. In addition, under CBOE Rule 12.10, the CBOE may determine at any time to impose higher margin requirements than those described above when it deems such higher margin requirements to be advisable.

## F. <u>Bid-Ask Differentials, Minimum Price Variations, and Strike Price Intervals</u>

For each binary index option traded on the Exchange, a market maker is expected to quote so as to create differences between the bid and the offer of no more than the wider of 25% of the designated exercise settlement value or \$5.00, except during the last trading day prior to the expiration, when the maximum permissible price differential is the wider of 50% of the designated exercise settlement value or \$5.00. The minimum price variation for binary index options, established by class, will be no less than \$0.01. The CBOE will list binary index options using the strike price intervals currently used for traditional index options.

# G. <u>FLEX Trading</u>

Binary options will be eligible for trading as Flexible Exchange Options as provided for in Chapters XXIVA and XXIVB of the CBOE's rules. 44 The position limit methodology in CBOE Rule 22.6, discussed above, will apply to binary index options traded as Flexible Exchange Options. 45

## H. Other Considerations

The CBOE represents that it believes that the Exchange and the Options Price Reporting

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<sup>41</sup> See CBOE Rule 22.14(a).

<sup>42 &</sup>lt;u>See</u> CBOE Rule 22.13(b).

<sup>43 &</sup>lt;u>See CBOE Rule 22.3(d).</u>

<sup>44 &</sup>lt;u>See</u> CBOE Rule 22.16.

<sup>45</sup> See CBOE Rule 22.16.

Authority have the necessary systems capacity to handle the additional message traffic associated with the listing and trading of binary options on broad-based indexes. In addition, the CBOE represents that it has an adequate surveillance program to monitor trading in binary options on broad-based indexes, and that the Exchange intends to largely apply its existing surveillance program for options to the trading of binary index options.<sup>46</sup>

#### III. Discussion

The Commission finds that the proposed rule change, as amended, is consistent with the requirements of the Act and the rules and regulations thereunder applicable to a national securities exchange. The Commission finds that the proposal is consistent with Section 6(b)(5) of the Act, which requires, among other things, that the rules of a national securities exchange be designed to prevent fraudulent and manipulative acts and practices, to promote just and equitable principles of trade, to remove impediments to and perfect the mechanism of a free and open market and a national market system, and, in general, to protect investors and the public interest. The Commission believes that binary options on broad-based indexes will provide investors with a potentially useful investment choice. The proposal will extend to these options the benefits of a listed exchange market, which include a centralized forum for price discovery, pre- and post-trade transparency, standardized contract specifications, and the guarantee of the OCC.

The Commission believes that the proposal is reasonably designed to address potential manipulation concerns associated with binary options' non-linear return. The initial and

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See e-mail message from Jennifer Yeadon, Senior Attorney, CBOE, to Yvonne Fraticelli, Special Counsel, Division of Trading and Markets, dated May 20, 2008.

In approving this proposed rule change, the Commission has considered the proposed rule's impact on efficiency, competition, and capital formation. <u>See</u> 15 U.S.C. 78c(f).

<sup>&</sup>lt;sup>48</sup> 15 U.S.C. 78f(b)(5).

continued listing standard established herein provide that the Exchange may list and trade binary options only on broad-based indexes. In addition, these binary options will be a.m.-settled, unless the traditional options on the underlying index are p.m.-settled. These elements should reduce the potential for manipulating the index underlying a binary option to benefit a binary index option position.

The Commission believes that the proposed position limits and margin rules are reasonable and consistent with the Act. The proposed position limits for binary index options appear to reasonably balance the promotion of a free and open market for these securities with minimization of incentives for market manipulation. The proposed margin rules appear reasonably designed to deter a member or its customer from assuming an imprudent position in binary index options.

In support of this proposal, the CBOE made the following representations:

- the CBOE has in place an adequate surveillance program to monitor trading
  in binary options on broad-based indexes and intends to largely apply its
  existing surveillance program for options to the trading of binary options on
  broad-based indexes; and
- the CBOE has the necessary systems capacity to support the new options series that would result from the introduction of binary options on broadbased indexes.

This approval order is based on the CBOE's representations.

# IV. Conclusion

IT IS THEREFORE ORDEED, pursuant to Section 19(b)(2) of the Act,<sup>49</sup> that the proposed rule change (SR-CBOE-2006-105), as modified by Amendment No. 2, is approved.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.  $^{50}\,$ 

Florence E. Harmon Deputy Secretary

<sup>&</sup>lt;sup>49</sup> 15 U.S.C. 78s(b)(2).

<sup>&</sup>lt;sup>50</sup> 17 CFR 200.30-3(a)(12).